



# The Hong Kong Daily Press.

No. 8158

日七月一周年中華

HONGKONG, WEDNESDAY, FEBRUARY 13TH, 1884.

三月三號

PRICE \$2 PER MONTH

## SHIPPING.

## ARRIVALS.

February 11. Cretors, British str., 1,420.  
Jero, Yokohama 4th Feb., General-BUTTERFIELD & SWINE.

February 11. D'ARCY, British steamer, 561.  
J. Norton, Bangkok 3rd February, Rice and General-YERN FAT HOY.

February 12. ANDREAS, French str., 2,458.  
Tillier, Marseilles 6th January, Naples 8th, Port Said 12th, Suez 14th, Aden 19th, Colombo 27th, Singapore 3rd February, and Saigon 7th, Mails and General-MESSAGERIES MARITIMES.

February 12. DE BAR, British str., 1,087.  
C. Lévy, Nagasaki 8th February, General-MIURA BISHI MAIL S. S. CO.

February 12. JANETTE, British str., 982.  
Schulz, Saigon 6th February, General-Stern & Co.

February 12. PAKING, British steamer, 954.  
Hossmann, Bangkok 5th Feb., Rice and General-Stern & Co.

February 12. HACROZ, British str., 1,589.  
Billinge, Shanghai 9th February, General-BUTTERFIELD & SWINE.

## CLEARANCES.

AT THE HARBOUR MASTER'S OFFICE.  
FEBRUARY 12TH.

Sin Kolpa, British bark, for Nagasaki.  
Wilhelm Hoyer, German bark, for Takao.  
Ningpo, British str., for Shanghai.  
C. H. Kian, British str., for Swatow.

## DEPARTURES.

February 12. GAYNDOWN, British str., for Hobson.  
February 12. OXUS, French steamer, for Europe, &c.  
February 12. CYCLOPS, British steamer, for London.  
February 12. NINGPO, British steamer, for Shanghai.  
February 12. M. A. DIXON, British bark, for Keelung.

## PASSENGERS.

ARRIVED.  
Per Danube, str., from Bangkok.—14 Chinese.  
Per Yantze, str., from Saigon.—8 Chinese.  
Per Peking, str., from Bangkok.—Mr. and Mrs. Goddard and 4 children, and 15 Chinese.  
Per Andry, str., for Hongkong.—From Malacca—Miss Pauline Brissand, and Gilbert.  
From Naples.—Mr. Nease, From Singapores.—3 Chinese.—From Saigon.—Monsieur Francois, Auguste and Andre, Misses Laplace and Bedot, Miss Owles, and 15 Chinese.  
Per Hector, str., from Shanghai.—Messrs. Harrison, Maxwell, and French, and 7 Chinese.  
DEPARTED.  
Per Geyserund, str., for Hobson.—50 Chinese.  
Per Oceania, str., from Hongkong.—For Saigon.  
Messa, Auguste Collin, and Philip.  
For Saigon, str., S. A. and J. T. Morris.  
For Naples, str., for Macao.—Mr. C. H. Forrest.  
From Shanghai.—For Macao.  
—For Roma.—From Yokohama.—For Batavia.—Mr. E. H. Forrester, Mrs. Anna A. Morris, and servant, Mr. and Mrs. Iller, 4 children, and European female servant, Count Raphael de Vial Casta, Messrs. J. J. Jeville, T. Vivian, John Dow, N. Meis, M. Landau, Conrado, Rev. T. de la Haut, and N. Hashiguchi.

## REPORTS.

The British steamer *Hector* reports left Bang-  
kok on the 5th inst., and had very strong mon-  
soon with high rough seas from Palo Condor to  
port.

The British steamer *Hector* reports left Shanghai on the 9th inst., from 9 to 10 p.m., calm, from the sea to port fresh N.E. winds and  
cloudy with rain.

The British steamer *Danube* reports left  
Bangkok on the 6th inst., and had light winds  
and a moderate sea, and fine weather, and  
heavy sea, from thence to land strong N.E. winds,  
and equally with thick fog; coasting land  
heavy sea throughout; anchored off Ladron Is-  
land at 6 p.m., 11th on account of thick weather.

FAGASAKI SHIPPING.

January 27. Gresham Hall, British str., from Shai.  
27. Hiroshima Maru, Jap. str., from Kobe.  
28. Waverley, British str., from Shanghai.  
28. C. Mardon, British str., from Shanghai.  
29. Wladyslaw, Russian str., from Shai.  
29. Khiva, British str., from Hongkong.  
29. Iago, German str., from Yokohama.  
30. Kastor, British str., from Kobe.

February 1. Nagoya Maru, Japanese str., from Shai.  
1. Da Bay, British str., from Hongkong.

JANUARY—DEPARTURES.  
26. Sea Swallow, British bark, for Shanghai.  
26. Chelotta, British str., for Hongkong.  
26. Balak, Russian str., for Shanghai.  
28. Tyne, British str., for London.  
28. Kamakura Maru, Jap. bark, for Kobe.  
29. Kastor, German str., for Shanghai.  
30. Kastor, British str., from Kobe.

February 1. Nagoya Maru, Japanese str., from Shai.  
1. Da Bay, British str., from Hongkong.

VEHICLES ARRIVED IN EUROPE FROM CHINA, JAPAN, AND MANILA.  
(For last Month's Advice.)

San Augustin (s.). Manila Dec. 10  
Iphigenia (s.). China Dec. 13  
D. B. Hill (s.). Hongkong Dec. 13  
Achilles (s.). Shanghai Dec. 14  
Dartmouth (s.). Shanghai Dec. 24  
Surpdon (s.). Shanghai Dec. 24

VEHICLES ARRIVED AT HONGKONG.  
(Corrected to Date).  
Margrave (s.). Paris Sept. 13  
Charlotte (s.). Paris Sept. 13  
H.M.S. Mina Plymouth Sept. 28  
Aur (s.). Cardiff Oct. 15  
Constance (s.). Paris Oct. 21  
America (s.). Marseilles Nov. 1  
Figaro (s.). Paris Oct. 16  
Emanuela (s.). Hamburg Nov. 1  
Medina (s.). Cardiff Nov. 28  
Levi C. Wade (s.). Cardiff Nov. 30  
Embleton (s.). Glasgow Nov. 30  
Heinrich (s.). Cardiff Dec. 1  
Elo (s.). Cardiff Dec. 3  
Honawar (s.). Liverpool Cardiff Dec. 5  
Ari (s.). Cardiff Dec. 14  
Lionel (s.). Cardiff Dec. 19  
Siria (s.). Glasgow Dec. 19  
Oleander (s.). Glasgow Dec. 19  
Andrew Jackson (s.). Cardiff Dec. 21  
Nestor (s.). London Dec. 22  
Bergens (s.). Leith Dec. 23

PORTLAND CEMENT  
J. B. WHITE & BROS.  
SOLE AGENTS FOR CHINA.

HOLLIDAY, WISE & CO.  
Hongkong, 11th April, 1883.

## NOTICE.

WE have appointed Messrs. OVERBECK  
& CO. of Shanghai Sole Agents  
for the sale of our OLD HIGHLAND  
WHISKY in China and Hongkong.

Kilmarnock 10th November, 1883.

JOHN WALKER & SONS.

For Sale at 89 per Case of 1 dozen Bottles.

SIEMSEN & CO.

Hongkong, 18th January, 1884.

## INTIMATIONS.

## THE PATENT.

"FILTRE RAPIDE"  
Removes all Organic and Inorganic Impurities, Lead, Copper, and Poisonous Gases. It Purifies the Water.

It can be taken to pieces and cleaned in every part.

It has been awarded

Special Medal of Merit by the Sanitary Institute of Great Britain.

Silver Medal National Water Supply Exhibition, London.

Two Silver Medals International Food Exhibition, London.

Two Certificates of Merit by Sanitary Institute, Exeter.

Certificates of Merit International Medical and Sanitary Exhibition, Kilmarnock.

Silver Medal Health Congress and Scientific Exhibition, Brighton.

LANE, CRAWFORD & CO.

4th January, 1884.

1884.

HONGKONG ICE COMPANY, LIMITED.

NOTICE.

ON and after the 1st October the PRICE

of ICE will be reduced to 14 Cents per Pound.

JARDINE, MATHESON & CO., General Managers.

17th September, 1883.

1883.

BOOTS, SHOES, &c.

W. BREWER is now showing a large

Consignment of 1,000 pairs of

LADIES', GENTLEMEN'S and CHILDREN'S

BOOTS AND SHOES,

which, to effect a speedy clearance, he will sell

at English Prices.

A quantity of LAWN TENNIS SHOES.

W. BREWER,

Queen's Road.

KELLY AND WALSH'S NEW TAUCHNIK VOLUMES.

Blind, by Rhode Bronchon.

The Mistletoe Bouquet, by Anthony Trollope.

Ghosts, by Matthew Grey, by Flora Mayatt.

The Apple Tree, by Author of *Milly Brown*.

Through Our Administration, F. H. Burnett.

Portrait Etienne—Miss Braddon.

Wanda—Gode.

A Chance Acquaintance—W. D. Howells.

Regimental—J. S. Winter.

Disarmed—Miss Barbara Edwards.

La Nere Baucha—Anthony Trollope.

Her Afternoon—Emma Marshall.

—And Her Morning—W. D. Howells.

Treasure's Temptation—Arlie Carr.

Mrs. Forrester.

Oss Tramp—John Habberton.

JUST RECEIVED.

Powerful Fish, Marine, and Opera Glasses.

New Sketching Books.

Whistaker's Almanack, 1884.

National Almanack, 1884.

New Moorshead's and Briar Root Pipes and Cigar and Chocolate Holders.

KELLY & WALSH.—HONGKONG.

NOTICE.

H. CAMPBELL, late of Hongkong, has the honor to inform the Gentlemen and Public of Hongkong that he has OPENED

A FIRST CLASS HAIRDRESSING SALOON at BANK BUILDINGS, opposite the Hongkong Hotel. Mr. CAMPBELL's assistants, Messrs. DUTTON and OTTO, are thoroughly experienced in their business, the former being from one of the leading San Francisco establishments, while the latter is from one of the best in New York. Mr. W. Moore's establishment in Hongkong. Mr. CAMPBELL hopes by strict attention to the wants of the Public, to merit a share of their patronage.

24th January, 1884.

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PRIVATE DANCES.

SIGNOR GIUSEPPE PENATI, Professor

of Music in Hongkong, is open to engagements as PIANIST at Private Dancing Parties. Charges steadily moderate.

Address No. 24, Praya Central.

27th November, 1883.

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MAIL TABLES.

THE TABLE OF ARRIVALS AND DEPARTURES OF BRITISH AND FOREIGN MILLS

at and from LONDON and HONGKONG.

PRINTED BY THE CHINESE AND DIALECT

P. 401 of Large edition, p. 649, small edition.

Separates Caprice, with Anglo-Chinese Calendar.

can be had at 10 cents each or \$1 per dozen.

Daily Press' Office.

1st February, 1884.

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ROBT. SIM & CO.'S PATENT ANTI-FOULING COMPOSITION.

Her Majesty's Ships, The P. & O. S. N. Co.

The Douglas Steamship Co., The Japanese Government.

Edward George.

31st January, 1884.

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AGENCIES ORIGINALLY ESTABLISHED IN CHINA IN 1847.

CUTLER, PALMER & CO., WINE SHIPPERS.

call attention to some of the Specialities they now export to China, viz.:

Their Old \*\*\* COGNAC; quality never varies more than does their \*\*\* COGNAC.

Their own Blend of SCOTCH WHISKY.

Their GENUINE PORT for Invalid's use.

Their SHERRY, which maintains a good repute.

Their CIGARETTES, as produced in the vineyards.

THE ROYAL CHAMPAGNE, used by Her Majesty the Queen.

They have also a number of other items always to be had at the Godowns of one firm.

LADING, MATHESON & CO., Hongkong and Shanghai.

10th November, 1883.

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OLD HIGHLAND WHISKY.

WE have appointed Messrs. OVERBECK

& CO. of Shanghai Sole Agents

for the sale of our OLD HIGHLAND

WHISKY in China and Hongkong.

NOW READY.

THE CHRONICLE & DIRECTORY  
For 1884.  
With which is incorporated  
THE CHINA DIRECTORY.(TWENTY-SECOND ANNUAL ISSUE).  
ROYAL OCTAVO, pp. 1,080. . . . . . 35.00.  
SMALL EDITION, pp. 634. . . . . . 33.00.THE CHRONICLE AND DIRECTORY  
has been thoroughly revised and brought up  
to date, and is a much increased in size.

It contains DESCRIPTIVE and STATISTICAL

ACCOUNTS of, and DIRECTORIES for

HONGKONG—JAPAN—

Drs. Ladies Directory Nagasaki.

Drs. Military Forces. Korea (Hirogo).

Dr. Chinese Goods. China.

Machinery. India.

Cottons. Japan.

Oils. India.

Fats. Japan.

Parched. India.

Hochow. China.

Whampoa. China.

Canton. China.

Swatow. China.

Amoy. China.

Tsinanfu. China.

Tamsui. China.

Keelung. China.

Fouochow. China.

Wenchow. China.

Shanghai. China.

Chinkiang. China.

Wuhu. China.

Ningpo. China.

Kuangtung. China.

Makau. China.

Iehang. China.

Lanchow. China.

Chefoo. China.

Taku. China.

Tientsin. China.

Peking. China.

Newchwang. China.

Canton. China.

Siam. Siam.

Malaya. Siam.

British North Borneo. Siam.

China. Siam.

Saigon. Siam.

Cambodia. Siam.

ANNAM—Hue.

Tun. Siam.

Quilon. Siam.

Tomek. Siam.

Hongkong. Siam.

Hainan. Siam.

STAM—Bangkok. Siam.

STRaits SETTLEMENTS—Singapore. Malacca.

Dutch East Indies. Malacca.

Malaya. Malacca.

British South Africa. Malacca.

Portuguese Brazil. Malacca.

NAVAL SQUADRONS—United States. America.

French. France.

SHIPPING—Officers of the Coastal Steamers of P. &amp; O. S. N. Co. China &amp; Manlia C.

Messrs. Marlin. China &amp; Manlia C.

M. B. M. S. Co. H. C. &amp; M. S. B. Co.

India-China S. N. Co. Scottish Oriental Douglas S. S. Co. Miscellaneous Coast China Merchants' Steamers.

The MAPS and PLANS have again been increased in number. They now consist of PLANS OF MERCANTILE HOUSES IN CHINA. MAP OF THE CITY OF VICTORIA PEAK. NEW MAP OF THE FAR EAST. MAP OF THE ISLAND OF HONGKONG. PLAN OF THE CITY OF VICTORIA. PLAN OF CANTON. PLAN OF FOREIGN CONCESSIONS, SHANGHAI. PLAN OF YOKOHAMA. PLAN OF MANILA. PLAN OF SAIGON. MAP OF TOWN AND ENVIRONS OF SINGAPORE.

The LIST OF RESIDENTS now contains the names of

ELEVEN THOUSAND TWO HUNDRED, AND SEVEN THOUSAND FORTY-EIGHT, arranged under one Alpha in the strictest order, the initials as well as the surnames being alphabetical.

Among the other contents of the book are—

A Long Chinese Calendar. Meetings of Sun-

rise and Moon. Astrology, &amp;c., &amp;c.

A full Chronology of remarkable events since the advent of foreigners to China and Japan. A description of the Festivals, Fasts, &amp;c., observed by Chinese, Macassars, Persians, Jews, &amp;c., with the days on which they fall. Comparative Tables of Money, Weights, Mea-sures, &amp;c.

The Hongkong Postal Guide for 1884.

Arrival and Departure of Mails at and from London and Liverpool. List of Posts and Offices of Commissions and Charges adopted by the Chambers of Commerce of Hongkong, Shanghai and elsewhere.

Hongkong Chirr, Jinchikia, and Boat Hire.

The APPENDIX consists of

FOUR HUNDRED Pages of closely printed matter, the first reference is constantly made by the author, and those having commercial or political relations with China, Japan, or any of the Countries embraced within the scope of the CHRONICLE and DIRECTORY.

The Contents of the Appendix are too many to enumerate in an advertisement, but include—

TREATIES WITH CHINA—Great Britain, Nanking, 1842—

France, Tianjin, 1858—

and all others not abro-

gated, France, Tianjin, 1858—

Convention, 1860—

United States, Tianjin, 1858

" " Adm. 1863

Germany, Tianjin, 1861

Peking, 1860

Russia, various

Japan

Spain

Brazil

Peru

TREATIES WITH JAPAN—Great Britain

United States

Netherlands

Corse

TREATIES WITH COREA

TREATIES WITH SIAM

TREATIES WITH ANNAM

TREATIES WITH CAMBODIA

Customs Tariffs

Chinese

Japanese

Siamese

LEGAL

Orders in Council for Government of H.B.M.

Subjects in China and Japan, 1853, 1877,

1878, 1881

Rules of H.B.M. Supreme and other Courts in China and Japan

Code of Civil Procedure, Hongkong

Admiralty Rules

Foreign Jurisdiction Act

Act of United States Congress Relating to Treaties

Regulations for the Consular Courts of United States in China

Rules of Court of Consuls at Shanghai

Chinese Passenger Act

Trade Regulations

China

Japan

Siam

Customs Seizure, China

Customs and Harbour Regulations for the different ports of China, Philippines, Siam, &amp;c.

Pilotage Regulations

Charter of the Colony

Rules of Legislative Council

&amp;c., &amp;c.

The Treaties between United States and Corea, France and Annam, and several other nations have not appeared in previous issues

Orders may be sent to Daily Press Office, where it is published, or to the following Agents—

MACAO—Messrs. A. de Mollo &amp; Co.

SWATOW—Messrs. Quach &amp; Co.

AMOK—Messrs. Wilson, Nichols &amp; Co.

FORMOSA—Messrs. Wilson, Nichols &amp; Co.

POOCHOW—Messrs. Hedges &amp; Co.

NINPO—Messrs. Hedges &amp; Co., S'g'd.

CHINCHIAO—Messrs. Hall &amp; Walsh.

SHANGHAI—Messrs. Hall &amp; Walsh.

EVER POET—Messrs. Walsh, Shanghai.

NAGASAKI—The C. &amp; J. Trading Co.

HOKKAIDO—MESSRS. The C. &amp; J. Trading Co.

YOKOHAMA—Messrs. Kelly &amp; Co.

MANILA—Messrs. Vindula Loyanga &amp; Co.

SINGAPORE—Messrs. Crichton &amp; Co.

BANGKOK—Messrs. Crichton &amp; Co.

SINGAPORE—Messrs. Sayle &amp; Co.

PEKING—Mr. H. M. Mardon.

COLOMBO—Messrs. A. M. &amp; J. Ferguson.

LONDON—Mr. F. Alcock, Clerkenwell Lane.

LONDON—Messrs. Bates, Henty &amp; Co.

SAN FRANCISCO—L. P. Fisher, 21, Merchant's Exchange.

NEW YORK—Messrs. S. &amp; J. Gould, 37 Park Row.

Daily Press Office, 26th January, 1884.

## NOTICE.

S. WATSON & CO.  
A. FAMILY AND DISPENSING  
CHEMISTS,  
By Appointment to His Excellency the  
DUKE OF EDINBURGH,  
WHOLESALE AND RETAIL DRUGGISTS,  
PERFUMERS.

PATENT MEDICINE VENDORS.

DRUGGISTS' SUNDRYS.

And  
AERATED WATER MAKERS.SHIP'S MEDICINE CHESTS REFRIGERATEE,  
PASSENGER SHIPS SUPPLIED.NOTICE.—To avoid delay in the execution of  
Orders it is particularly requested that all  
business communications be addressed to the  
Firm, A. S. Watson & Co.,  
HONGKONG DISPENSARY. [23]

ble to England. It may, therefore, be possible at some future date to gain England's assistance in effecting an amicable arrangement. If England puts forth all her might to protect Turkey, it is improbable that she would make some slight effort to aid China. To this some may object, and say that Russia and England are alike in their rapacious tendencies, and that there is no likelihood of gaining England to our side. This argument ignores the fact that England, though still outwardly powerful, is gradually losing the substance of her strength; and that her present policy is directed towards maintaining her high position by peaceful measures. She is far different now from what she was in Tao Kwee's reign, and there would be no difficulty in coming to an understanding with her.

A Chinaman may be pardoned for thinking that England is less powerful now than formerly, while as to her "rapacity," it is evident that she has been dragged into a policy of annexation through her mission, and that she is now acting as a pawn in the hands of the Powers.

NOTICES TO CORRESPONDENTS.

All notices for publication should be written on one side of the paper only.

Advertisements and Subscriptions which are not entered for a fixed period will be continued until unclaimed.

Communications on Editorial matters should be addressed to "The Editor," and those on business to "The Manager," and not to individuals by name.

Orders for extra copies of the Daily Press should be sent before 11 a.m. on the day of publication. After that hour the supply is limited.

Correspondents are requested to forward their name and address with communications addressed to the Editor, not for publication, but as evidence of good faith.

## MARRIAGE.

On the 23rd December last, Philip and James, Oxford, the father and the son of Mr. G. C. Giles, H. B. M.'s Vice-Counsel, Shanghai, were married to Miss Williamina (Mina), fifth daughter of the Rev. A. Eccles, D.D.

DATH.

At Macao, on the 11th February, at 8 p.m., M. C. Giles, H. B. M.'s Vice-Counsel, Shanghai, and his wife, were married to Mr. Edward Wilson, merchant, of this port.

We have often wondered how it is that the Peking Government have shown so slight an appreciation of the value of an alliance with Great Britain. Most Chinese officials have exhibited little desire to cultivate the friendship of England, and Chinese policy of late years has inclined them far more towards other Western Powers. This, too, in spite of the fact that Sir Thomas Wade, acting under instructions from the Foreign Office, showed a decidedly conciliatory front. But no; his very forbearance was misconstrued into weakness or timidity, and in 1876 this misconception brought the two countries to the very verge of war. It was not until the difficulty with Russia over the Kuldja question arose, which led to the repudiation by China of the treaty concluded by CHUNG How with M. de Guise, that the Peking mandarins began fully to recognise that they had an enemy more to be feared than England. The lessons which the forbearance of England in restoring Clusian and merely retaining the barren rocky islet of Hongkong as a naval and commercial station in these waters should have taught the Chinese rulers appear to have been quite lost upon them. One would imagine that they thought the only reason the British and French troops did not seize two or three of the eighteen provinces was a fear of being driven out. Yet the Allies had, during the last war, the Chinese empire practically at their feet. Had England elected to take Kwangtung and France Fokien, no one could or would have said them nay. That they did not do so was the result of a moderation which the Peking Government might vainly expect from Russia.

Yet with M. de Guise, that the Peking mandarins began fully to recognise that they had an enemy more to be feared than England. The lessons which the forbearance of England in restoring Clusian and merely retaining the barren rocky islet of Hongkong as a naval and commercial station in these waters should have taught the Chinese rulers appear to have been quite lost upon them. One would imagine that they thought the only reason the British and French troops did not seize two or three of the eighteen provinces was a fear of being driven out. Yet the Allies had, during the last war, the Chinese empire practically at their feet. Had England elected to take Kwangtung and France Fokien, no one could or would have said them nay. That they did not do so was the result of a moderation which the Peking Government might vainly expect from Russia.

The subjoined notice is gazetted.—The BEFS (East Kent Regiment).—Lieut.-Colonel Chapland Graves has been appointed to command Battalion; Major Henry Thomas Falshaw to Lieut.-Colonel, via Col. H. Parcell, B.E.F.; Lieut.-Colonel, via Capt. H. Parcell, B.E.F.; Lieut.-Colonel, via Capt. Arthur Charles Lister, via Capt. Arthur

found a part of the deal of the ball-hold charged for about a week I could cover with my two hands. It was amazementing but not blinding, and none of the tea that I could see was blinding. This was on the port side, and when I went to the starboard side, it was smouldering in much the same way. To my knowledge none of the crew left the ship without orders that night, and I saw those who were off on deck, and those on the port at the time. I saw no signs whatever of striking. At first, most of the men were off, but a number was sent forward with the second officer. Six or seven men remained aft, and there was quite a number of men from ashore, so that there was no want of men to work the buckets and hoses. I think the worst part of the fire was over when the explosion occurred, at least as far as that side of the deck was concerned.

The case was further adjourned at this stage till 10.30 this morning.

#### ELECTRICAL TIME BALL APPARATUS FOR HONGKONG.

We have recently had an opportunity of inspecting the above apparatus, which, when it arrives at its destination, and is erected, will be discharged from the Observatory now being established at Hongkong, under its director, Dr. Deacon.

In our journal of July 15th, 1880, we gave a description, illustrated with woodcuts, of a very complete set of apparatus designed by Mr. Varley for the Indian Government. This apparatus has since been erected, and gives daily correct time at Fort William, by firing a time gun and dropping a large ball, and also at the port of Calcutta, by dropping a similar time ball erected at the latter.

As we have a very full description of the construction of the apparatus supplied to the Indian Government, and the apparatus to be used at Hongkong differs from it, chiefly in matters of detail, we purpose in this article to confine ourselves to matters of general interest connected with these signals, and to describe what Mr. Varley has planned to accomplish in his time ball system.

We are indebted to Prof. Aitch, the late Astronomer Royal, and Mr. Edwin Clark, for the suggestion, and the first application of electricity to dropping time balls, and among the many useful purposes to which electricity is now being applied, that of giving correct time to our seaport towns, both here and abroad, is perhaps not the least valuable.

The first time ball which was discharged by electricity was erected at the Clarendon Cross Station, of the late Bishop, and later, the Telegraph Company in 1850 and in 1851 a similar last ball was erected by the same company, at their Liverpool Telegraph station, which was then under the charge of Mr. S. Alfred Varley.

In first applications of telegraphy are almost invariably encountered, and the discharging of a ball certainly a ball weighing 4 tons from a distance of over 200 miles was no exception to this general rule. Some of these early and the way they were overthrown may be described by Mr. Varley in a paper read before the British Association\* meeting at Liverpool in 1870. Mr. Varley considers a time ball system should fulfil the following conditions:

1.—The superintendent at the Observatory, from whence the time signal emanates, should be absolutely certain the time ball at the distant stations fall, correctly, and he can only be sure of this by being able to see what takes place at the time ball station when the signal leaves the observatory.

2.—As the ball, after it is wound up, hangs for some few minutes on the trigger before 1 h., to prevent its being discharged before the proper time, which sometimes occurs, either from the time wire being accidentally in contact with a telegraph circuit, or from an atmospheric discharge, it must be electrically locked up till the arrival of the discharging current.

3.—The construction and arrangements should be such that the batteries, the time wire, and other parts of the apparatus, can be tested at any moment with facility, so as to be sure that everything is in proper working order before the time arrives for sending the signal.

4.—The time ball system, the time ball itself, and the above mentioned conditions is officially furnished by the Astronomer Royal's last annual report, from which we quote the following extract:

"The time ball has been dropped automatically at 1 h. every day throughout the year, with the exception of five days on which there was failure in the telegraphic connection, and on only three of these had it been accidentally dropped, 4 tons being given off signals, and of four days when the current was weak and the trigger was released by the attendant without appreciable loss of accuracy."

We believe we are correct in saying, that in all cases, except where the apparatus has been designed by Mr. Varley, time balls are discharged by an electro-magnet, the magnetism of which is produced by the time current. This magnet is attached to a soft iron armature and releases a series of little hooks which liberate a spiral spring which is discharged by sending a return signal to the observatory from batteries situated at the time ball station.

The diameter of the ball is 6 feet; the total height from the base to the top of the fusil is nearly 40 feet.

Although Mr. Varley considers all time balls at seaport towns should be worked on the polarized system with double currents, it must be noted that when the ball was accidentally dropped, 4 tons being given off signals, and of four days when the current was weak and the trigger was released by the attendant without appreciable loss of accuracy."

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